



Surge arrester

2-electrode arrester

Series/Type: ES400XSMD
Ordering code: B88069X5591T902
Version/Date: Issue 02 / 2007-01-12

Features	Applications
- Extremely small size - Extremely fast response time - Stable performance over life - Extremely low capacitance - High insulation resistance - Excellent SMD handling - RoHS-compatible	- Modem - Consumer electronics - Tuner

Electrical specifications

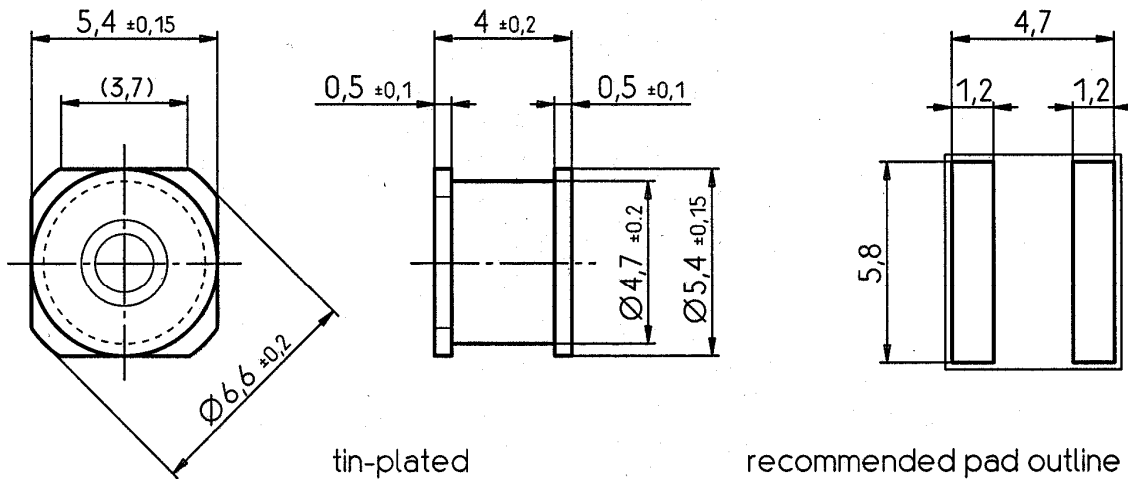
DC spark-over voltage ^{1) 2)}	400 ± 15	V %
Impulse spark-over voltage		
at 100 V/μs - for 99 % of measured values	< 800	V
- typical values of distribution	< 750	V
at 1 kV/μs - for 99 % of measured values	< 1000	V
- typical values of distribution	< 850	V
Service life		
10 operations 50 Hz; 1 s	2.5	A
10 operations 8/20 μs	2.5	kA
1 operation 8/20 μs	5	kA
Insulation resistance at 100 V _{dc}	> 1	GΩ
Capacitance at 1 MHz	< 1	pF
Arc voltage at 1 A	~ 11	V
Glow to arc transition current	< 0.5	A
Glow voltage	~ 80	V
Weight	~ 1	g
Operation and storage temperature	-40 ... +90	°C
Climatic category (IEC 60068-1)	40/ 90/ 21	
Marking, red negative	EPCOSES 400 YY O ES - Series 400 - Nominal voltage YY - Year of production O - Non radioactive	

¹⁾ At delivery AQL 0.65 level II, DIN ISO 2859

²⁾ In ionized mode

Terms in accordance with ITU-T Rec. K.12 and DIN 57845/VDE0845

Dimensional drawing



tin-plated

recommended pad outline

Not to scale

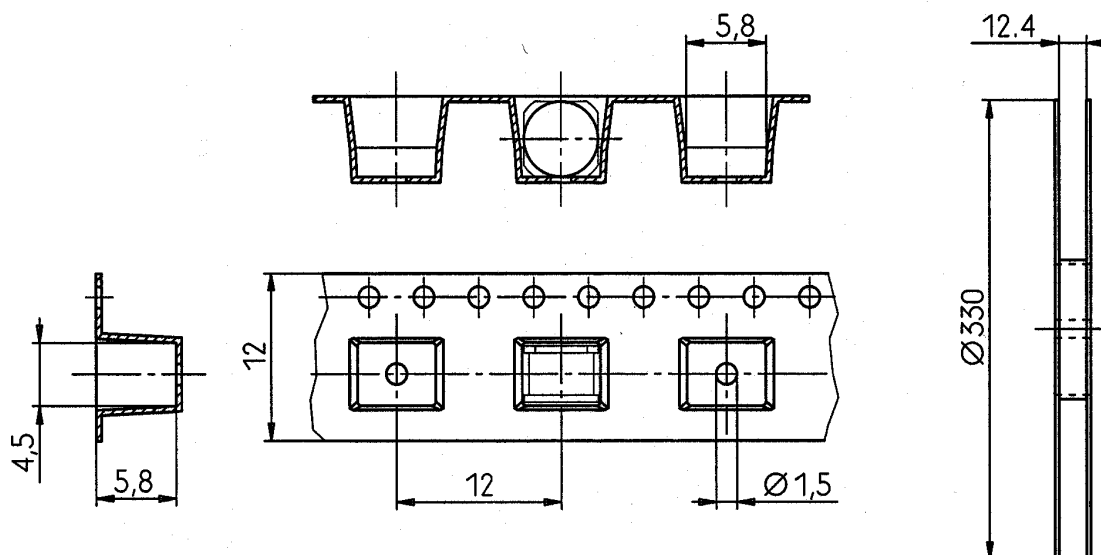
Dimensions in mm

Non controlled document

Packing advice

T902 = tape and reel with 900 pcs

Tape and reel packing comply with the specification of IEC 60286-3



Cautions and warnings

- Surge arresters must not be operated directly in power supply networks.
- If the contacts of the surge arresters are defective, current stress can lead to the formation of sparks and loud noises (bang).
- Surge arresters may become hot in case of longer periods of current stress (danger of burning).
- Surge arresters may be used only within their specified values. In case of overload, the head contacts may fail or the component may be destroyed.
- Damaged surge arresters must not be re-used.

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The following applies to all products named in this publication:

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